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# **WATER SUPPLY OUTLOOK FOR NEVADA**



**U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE**

Collaborating with

**NEVADA DEPARTMENT of CONSERVATION  
and NATURAL RESOURCES  
DIVISION of WATER RESOURCES**

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF  
**MAR. 1, 1977**

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW COURSE MEASUREMENTS BY A SURVEY TEAM IN UTAH'S WASATCH RANGE.  
ORC-254-10

### PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, 6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia







# WARNING

**You may have less Irrigation water this year than ever before.**

SNOW COURSE MEASUREMENTS MADE ON MARCH 1, 1977 CONTINUE TO INDICATE THAT MANY AREAS WILL HAVE SEVERE TO CRITICAL WATER SHORTAGES. STUDY THE ATTACHED WATER SUPPLY FORECAST CAREFULLY FOR STREAM FLOW AND/OR RESERVOIR STORAGE FIGURES THAT CONCERN YOUR AREA. KEEP IN TOUCH WITH YOUR IRRIGATION DISTRICT OR OTHER OFFICIALS FOR ESTIMATES OF THE SUPPLY AVAILABLE FOR YOU. YOU MAY FIND YOU'LL NEED TO CHANGE CROPS, PLANTED ACREAGE, TIMING OF WATER APPLICATION OR EFFICIENCY OF YOUR WATER DISTRIBUTION SYSTEM. THESE ARE SOME OF THE EARLY DECISIONS AND PLANS YOU MAY HAVE TO MAKE:

1. Change to crops which require less water.
  2. Reduce the crop acreage. Naturally, this will affect the fertilizer you order and the amount of seed you buy. Be sure unplanted land has cover crops to prevent wind erosion.
  3. Check out your irrigation systems carefully. Make certain that ditches have no water-wasting weeds or debris to slow delivery; that sprinkler heads don't have leaks, pipes have tight connections and pumps work properly. If new parts or equipment are needed, purchase them soon.
  4. Plant only the best land - it makes most efficient use of water. If your soil has been mapped, local Soil Conservation Service personnel can guide you. If not mapped, they can still give you general information.
  5. Maintain close contact with the Soil Conservation Service or your local Conservation District for the latest water supply forecasts, and for soil information. SCS has just published water conservation TIPS pamphlets for irrigators, farmers and ranchers. Get copies.
  6. Maintain close contact with the Agricultural Stabilization and Conservation Service county office. Funds for cost sharing on special water stretching practices may be made available because of the drought situation. ASCS also administers the Federal Disaster Assistance program.
  7. Do the same with your closest Farmers Home Administration office. Special loans may become available.
  8. Do the same with the local Cooperative Extension Service office for current information on crops, feed supply and marketing.
- SCS, ASCS AND FMHA ARE LISTED IN THE PHONE BOOK UNDER "U.S. GOVERNMENT, AGRICULTURE, DEPARTMENT OF." THE EXTENSION SERVICE IS USUALLY LISTED WITH LOCAL COUNTY OFFICES.



# **WATER SUPPLY OUTLOOK FOR NEVADA**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

*Issued by*

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SOIL CONSERVATION SERVICE  
WASHINGTON, D.C.

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*Released by*

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RENO, NEVADA

*In Cooperation with*

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## TABLE OF CONTENTS

WATER SUPPLY OUTLOOK FOR NEVADA.....	1, 2
PROSPECTIVE WATER SUPPLY FOR NEVADA (Map).....	3
INDEX OF NEVADA SNOW COURSES (By Basins).....	4
SNOW WATER DEPTHS (Map).....	5
NEVADA STREAMFLOW FORECASTS.....	6, 7
SPECIAL FORECASTS AND SOIL MOISTURE MEASUREMENTS.....	8
STORAGE STATUS OF NEVADA RESERVOIRS.....	9
SNOW COURSE MEASUREMENTS.....	10, 11, 12, 13
PRECIPITATION MEASUREMENTS.....	14
TELEMETERED SNOW DATA.....	15, 16
LIST OF COOPERATORS.....	Inside Back Cover

ALL AVERAGES ARE FOR 1958-72 PERIOD.



# WATER SUPPLY OUTLOOK FOR NEVADA

THE WATER SUPPLY OUTLOOK FOR NEVADA THIS SEASON CONTINUES TO BE VERY POOR. SEVERE SHORTAGES WILL BE EXPERIENCED IF PRESENT CONDITIONS CONTINUE. STREAMFLOW FORECASTS ARE MINIMUM WITH SEVERAL BEING LOWER THAN LAST YEAR'S STREAMFLOW.

SNOWPACK MEASUREMENTS FOR MARCH 1 INDICATE ONLY 15 TO 25 PERCENT OF THE 1958-72 AVERAGE. THERE IS NO PERCENTAGE INCREASE FROM LAST MONTH'S MEASUREMENTS. THE STORMS OCCURRING NEAR THE END OF THE MONTH ADDED ONLY SMALL AMOUNTS OF WATER.

RESERVOIR STORAGE IS POOR WITH THE EXCEPTION OF WILDHORSE, RYE PATCH, LAKE MEAD AND MOHAVE. COMBINE TOTALS OF LAKE TAHOE, BOCA, LAHONTAN, TOPAZ AND BRIDGEPORT ARE ONLY 392,000 ACRE-FEET COMPARED TO AN AVERAGE OF 729,000 ACRE-FEET AND LAST YEAR'S 830,000 ACRE-FEET.

## East Slope Sierra Nevada

March 1 snow course measurements indicate that water contents of the snowpack is still minimal. The snowpack is only 25 percent in the Lake Tahoe, Truckee, Walker and Carson basins. Present snowpack is less than last year's with ranges of 26 percent in the Walker to 42 percent in the Tahoe Basin; Donner Summit requires 28.2 inches of water to attain the April 1 average. Other snow courses and the amount of water needed to reach April 1 are: Lake Lucille 44.0 inches; Squaw Valley 34.4 inches; Marlette Lake 15.5 inches; Independence Lake 33.4 inches; Mount Rose 28.0 inches and Sonora Pass 18.5 inches.

Streamflow forecasts are for record low streamflow this summer. They are lower than last year's flows, many being the lowest on record. Lake Tahoe rise forecast for April 1 to high is only .15 feet. The Truckee River April 1 to July 31 forecast is 40,000 acre-feet for only 15 percent of average. The East Fork Carson near Gardnerville is forecast for 45,000 acre-feet for 23 percent of average. Other streams have similar percentage forecasts. Reservoir storage is below average. Lake Tahoe contains 165,000 acre-feet now as compared to last year's 502,000 acre-feet on March 1. Lahontan Reservoir contains 174,000 or only 85 percent of average. Topaz and Bridgeport contain 13,000 acre-feet each. There is very limited water for supplemental supplies.

### Humboldt River

The Humboldt River and tributaries are forecast for minimal flows this season. Snowpack conditions are similar to the Sierras with only 25 percent average water contents. Forecasts for April 1 to July 31 range from 8 percent for the Humboldt River at Comus to 27 percent on Marys River. Reservoir storage in Rye Patch Reservoir is above average with 108,000 acre-feet or 114 percent.

### Snake River

The Owyhee and Snake River drainages have snowpacks of only 20 percent, the lowest in the state. This is the direct opposite of last year's snowpack with above average snowpack.

Streamflow forecasts reflect the lack of snow with April 1 - July 31 flows near 20 percent. Wildhorse Reservoir contains 45,000 acre-feet, slightly lower than last year's 54,000 acre-feet. Streamflow to the reservoir is forecast for 3,000 acre-feet.

### Northern Great Basin

The Surprise Valley and Quinn River areas have snowpack conditions similar to other areas with about 25 percent of average. Small streams will have very little snowmelt runoff.

### Eastern and Central Nevada

Snowpack is 15 to 20 percent in these areas. Streamflow from snowmelt will be very limited.

### Lower Colorado

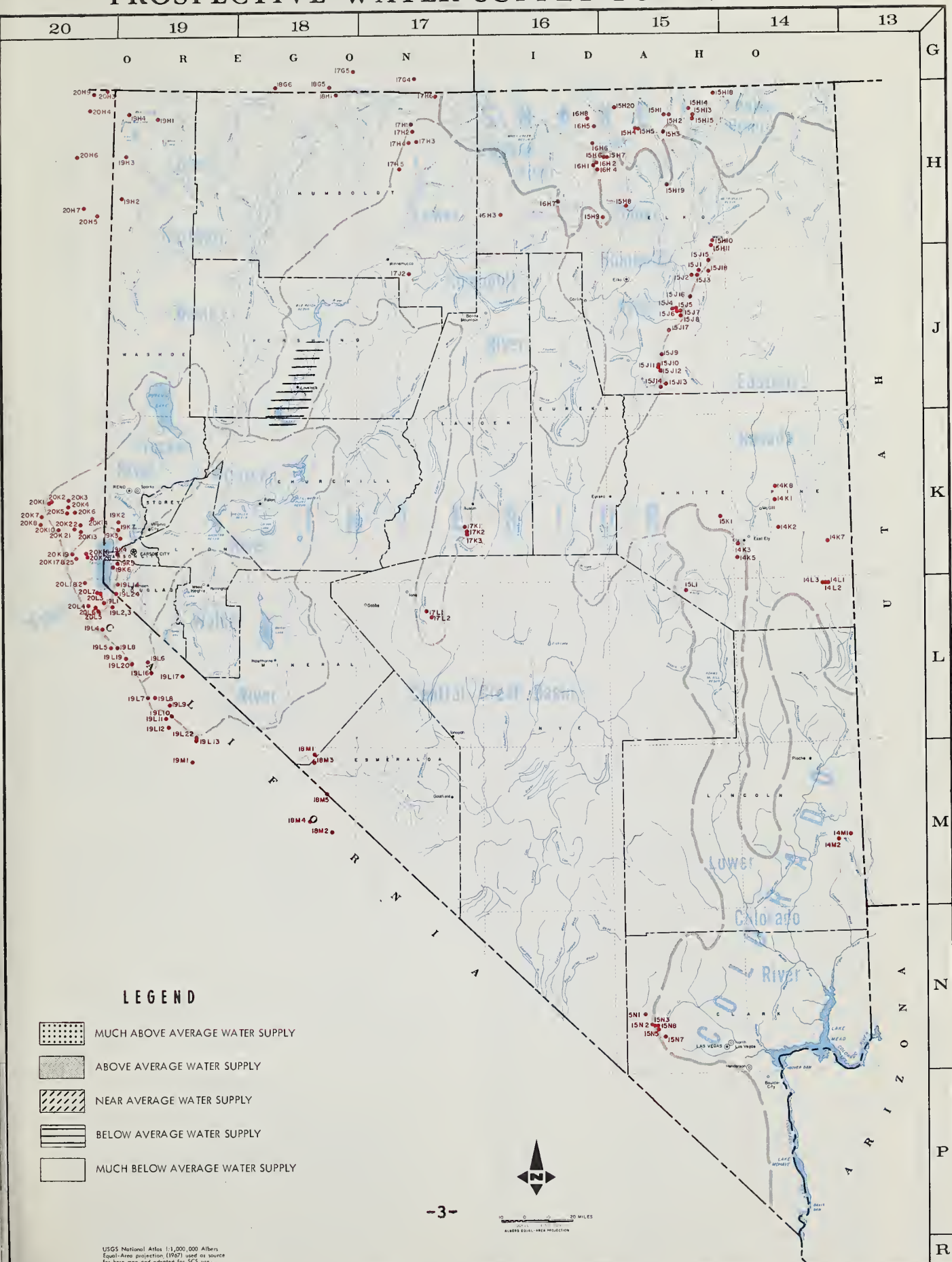
The Virgin River at Virgin, Utah forecast is 17,000 acre-feet for 35 percent of average. Snowpack conditions in the Mt. Charleston area are about 15 percent of average. Lake Mead contains 21,844,000 acre-feet and Mohave contains 1,671,00 acre-feet. This is a combined total of 23,515,000 acre feet as compared to last year's 22,209,000 acre-feet.

### NOTE:

The Soil Conservation Service has developed four water conservation brochures which give tips for stretching water for irrigation, pasture and range, crops and soils and yards and gardens.

Copies may be obtained from the local Soil Conservation Service and Conservation District Offices.

# PROSPECTIVE WATER SUPPLY FOR NEVADA





# INDEX TO NEVADA SNOW COURSES

(By Basins)

Refer to the map on the preceeding page for Snow Course locations.

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
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## SNAKE RIVER BASIN

### SNAKE RIVER

15H1MA	Bear Creek	31	46N	58E	7800
15H2	Fox Creek	33	46N	58E	6800
15H13A	Goat Creek	31	46N	60E	8800
15H15A	Hummingbird Springs	6	45N	60E	8945
15H20a	Merritt Mountain	10	46N	54E	7000
15H14A	Pole Creek Ranger Station	13	46N	59E	8330
15H18a	Red Point	15	47N	61E	7940
15H3A	76 Creek	6	44N	58E	7100
15H19a	Stag Mountain	29	41N	58E	7800

### OWYHEE RIVER

15H4MP	Big Bend	30	45N	56E	6700
16H6a	Columbia Basin	31	44N	53E	6650
16H8a	Fawn Creek	2	45N	52E	7000
15H5	Gold Creek	32	45N	56E	6600
16H1M	Jack Creek, Lower	18	42N	53E	6800
16H2A	Jack Creek, Upper	9	42N	53E	7250
16H4	Jacks Peak	28	42N	53E	8420
16H5	Laurel Draw	20	45N	53E	6700
17G4a	Louse Canyon (Oreg.)	27	40S	44E	6440
15H9MP	Taylor Canyon	35	39N	53E	6200

## INTERIOR

### UPPER HUMBOLDT RIVER

15J17a	American Beauty	32	31N	58E	7800
15J12A	Corral Canyon	27	28N	57E	8500
15J1MP	Oorsey Basin	28	35N	60E	8100
15J3	Ory Creek	5	34N	60E	6500
15H7	Fry Canyon	31	43N	54E	6700
15J9MP	Green Mountain	23	29N	57E	8000
15J10	Harrison Pass #1	9	28N	57E	6600
15J11	Harrison Pass #2	16	28N	57E	7400
15J4	Lamoille #1	15	32N	58E	7100
15J5	Lamoille #2	14	32N	58E	7200
15J6M	Lamoille #3	24	32N	58E	7700
15J7	Lamoille #4	19	32N	59E	8000
15J8P	Lamoille #5	31	32N	59E	8700
15J18a	Pole Canyon	31	35N	61E	9140
15J16a	Robinson Lake	23	33N	59E	9200
15H6MP	Roded Flat	36	43N	53E	6800
15J2	Ryan Ranch	1	34N	59E	5800
15H8	Tremewan Ranch	9	39N	55E	5700
15H10P	Trout Creek, Lower	28	37N	61E	6900
15H11A	Trout Creek, Upper.	4	36N	61E	8500

### LOWER HUMBOLDT RIVER

17K1	Big Creek Camp Ground	10	17N	43E	6600
17K2	Big Creek Mine	23	17N	43E	7600
17K3	Big Creek, Upper	26	17N	43E	7800
17H2	Buckskin, Lower	25	45N	39E	6700
17H1	Buckskin, Upper	11	45N	39E	8200
17L1	Corral, Lower	12	11N	40E	7500
17L2	Corral, Upper	20	11N	41E	8000
17J2	Golconda #2	22	35N	39E	6000
17H4	Granite Peak	22	44N	39E	7800
17H5	Lamance Creek	13	42N	38E	6000
17H3	Martin Creek	18	44N	40E	6700
16H3AP	Nidas	18	39N	46E	7200
16H7	Toe Jam a	29	40N	50E	7700

### EASTERN NEVADA

14L1	Baker #1	29	13N	69E	7950
14L2	Baker #2	30	13N	69E	8950
14L3	Baker #3	25	13N	68E	9250
14K2	Berry Creek	26	17N	65E	9100
14K1	Bird Creek	34	19N	65E	7500
15J13	Cave Creek	25	27N	57E	7500
15J14	Hager Canyon	34	27N	57E	8000
15J15	Hole-In-Mountain	6	35N	61E	7900
14K8	Kalamazoo Creek	34	20N	65E	7400
14K3	Murray Summit	25	16N	62E	7250
15K1	Robinson Summit	34	18N	61E	7600
14K7	Silver Creek #2	30	16N	69E	8000
14K5	Ward Mountain #2	25	15N	62E	8900

### CENTRAL GREAT BASIN

18M2	Campito Mountain (Cal.)	19	5S	35E	10200
18M5a	Chiatovich Flat	32	2S	34E	10500
15N2	Clark Canyon	8	19S	56E	9000
18M1	Montgomery Pass	4	1N	33E	7100
18M3a	Pinchot Creek	28	1N	33E	9300
18M4a	Piute Pass (Cal.)	33	4S	33E	11700
15N1	Trough Springs	23	18S	55E	8500

### NORTHERN GREAT BASIN

19H1	Bald Mountain	17	45N	21E	6720
20H5	Barber Creek (Cal.)	23	39N	16E	6500
20H6	Cedar Pass (Cal.)	12	43N	14E	7100
18G6a	Oenio Creek (Oreg.)	14	41S	34E	6000
18H1	Olaster Peak	8	47N	34E	6500
20H3a	Oismal Swamp (Cal.)	31	48N	17E	7000
20H7	Eagle Peak (Cal.)	35	40N	15E	7200
19H3	49-Mountain	7	42N	19E	6000
19H2	Hays Canyon	1	39N	18E	6400
19H4a	Little Bally Mountain	8	45N	19E	6000
20H9	Mt. Bidwell	6	47N	16E	7200
17G5a	Oregon Canyon (Oreg.)	9	40S	40E	7240
17H6a	Quinn Ridge	9	47N	41E	6300
20M4	Reservation Creek (Cal.)	12	46N	15E	5900
18G5a	Trout Creek (Oreg.)	10	41S	38E	7800

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
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## LAKE TAHOE

20L6STZ	Echo Peak	35	12N	17E	7800
20L5	Echo Summit (Cal.)	6	11N	18E	7450
20L7stz	Fallen Leaf (Cal.)	36	13N	17E	6300
19L2	Freel Bench (Cal.)	36	12N	18E	7300
19K6	Glenbrook #2	13	14N	18E	6900
19L3MSZ	Hagans Meadow (Cal.)	36	12N	18E	8000
20L4	Lake Lucille (Cal.)	28	12N	17E	8200
19K4MSTZ	Marlette Lake	18	15N	19E	8000
20L3	Richardsons #2 (Cal.)	6	12N	18E	6500
20L1	Rubicon #1 (Cal.)	6	13N	17E	8100
20L2	Rubicon #2 (Cal.)	6	13N	17E	7500
20K16	Tahoe City (Cal.)	6	15N	17E	6250
20K26	Tahoe City Alt. (Cal.)	7	15N	17E	6300
20K27	Tahoe City Cross (Cal.)	1	15N	16E	6750
19L1	Upper Truckee (Cal.)	21	12N	18E	6400
20K17M	Ward Creek (Cal.)	21	15N	16E	7000
20K25STZ	Ward Creek #2 (Cal.)	21	15N	16E	6750

## TRUCKEE RIVER

20K14	Boca #2 (Cal.)	28	18N	17E	5900
20K22	Brockway Summit (Cal.)	3	17N	16E	7100
20K21	Donner Park #2 (Cal.)	18	17N	16E	6000
20K10	Donner Summit (Cal.)	25	17N	14E	6900
20K7*	Fordyce Lake (Cal.)	34	18N	13E	6500
20K8*	Furnace Flat (Cal.)	10	17N	13E	6700
20K4MSTPZ	Independence Camp (Cal.)	34	19N	15E	7000
20K3	Independence Creek (Cal.)	14	19N	15E	6500
20K5	Independence Lake (Cal.)	9	18N	15E	8450
19K3	Little Valley	17	16N	19E	6300
19K2	Mt. Rose	7	17N	19E	9000
19K7	Mt. Rose Ski Area	30	17N	19E	9000
20K6	Sage Hen Creek (Cal.)	7	18N	16E	6500
20K19	Squaw Valley #2 (Cal.)	6	15N	16E	7500
20K13M	Truckee #2 (Cal.)	22	17N	16E	6400
20K2*	Webber Lake (Cal.)	29	19N	14E	7000
20K1*	Webber Peak (Cal.)	30	19N	14E	8000

## CARSON RIVER

19L5	Blue Lakes (Cal.)	30	9N	19E	8000
19L4	Carson Pass, Upper (Cal.)	22	10N	18E	8600
19K5	Clear Creek	6	14N	19E	7300
19L19a	Ebbetts Pass (Cal.)	17	8N	20E	8700
19L16a	Fish Valley, Upper (Cal.)	1	7N	22E	8050
19L06a	Poison Flat (Cal.)	25	8N	21E	7900
19L18AS	Wet Meadows Lake (Cal.)	26	9N	19E	8100
19L20a	Wolf Creek (Cal.)	35	8N	20E	8000

## WALKER RIVER

19L11	Buckeye Forks (Cal.)	20	4N	23E	8500
19L10	Buckeye Roughs (Cal.)	15	4N	23E	7900
19L12A	Center Mountain (Cal.)	4	3N	23E	9400
19L8	Leavitt Meadows (Cal.)	4	5N	22E	7200
19L17a	Loddell Lake (Cal.)	20	7N	24E	9200
19L7M	Sonora Pass (Cal.)	1	5N	21E	8800
19M1*	Tiosa Pass (Cal.)	30	1N	25E	9900
19L13	Virginia Lakes (Cal.)	5	2N	25E	9500
19L22MSZ	Virginia Lakes Ridge	32	3N	25E	9200
19L9	Willow Flat (Cal.)	21	5N	23E	8250

## COLORADO

### LOWER COLORADO RIVER

15N5	Kyle Canyon	27	19S	56E	8200
15N3	Lee Canyon #2	9	19S	56E	9200
15N8	Lee Canyon #3	10	19S	56E	8500
14M1	Mathew Canyon	10	6S	70E	6000
14M2	Pine Canyon	23	6S	69E	6200
15N7	Rainbow Canyon #2	6	20S	57E	8100
15L1	White River #1	31	13N	59E	7400

## LEGEND

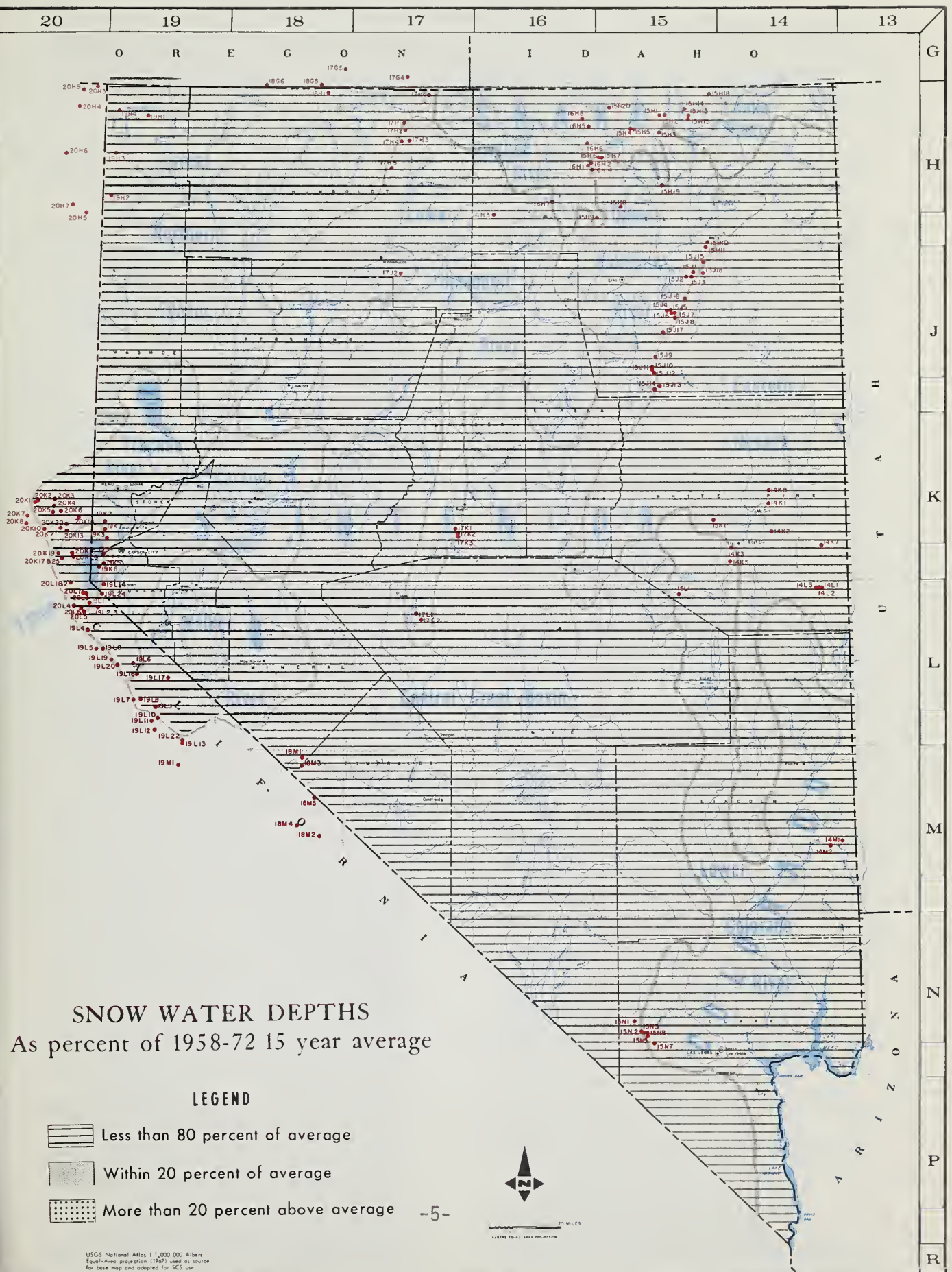
### NUMBERING SYSTEM (EXAMPLE)

19K4	Snow Course Only
19K4S	Snow Course and Snow Pillow
19K4M	Snow Course and Soil Moisture
19K4A	Snow Course and Aerial Marker
19K4P	Snow Course and Storage Precipitation Gage
19K4MA	Snow Course, Soil Moisture and Aerial Marker
19K4MP	Snow Course, Soil Moisture and Precipitation Gage
19K4STZ	Snow Course, Snow Pillow and Temperature Radio Telemetered.

Lower case letters m, a, p, s, t, z, indicate no snow course, only a Soil Moisture Station, Aerial Marker, Storage Precipitation Gage, Snow Pillow, Temperature, or Radio Telemetered.

\*Located on adjacent watershed

# SNOW WATER DEPTHS





# STREAMFLOW FORECASTS (Thousand Acre Feet) as of: March 1, 1977

Forecasts are based on snow-water presently stored in the mountain watersheds and the assumption that precipitation will be near average throughout the forecast period. Peak flow forecasts indicate the most probable range for the maximum average 24-hour flow. All averages are for 1958-72 period.

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
<u>TRUCKEE RIVER</u>				
Galena Creek near Steamboat, NV	April-July	1.8	42	4.4
Little Truckee River above Boca, CA <u>1/</u>	April-July	12	14	89
Truckee River at Farad, CA <u>1/ 2/</u>	April-July	40	15	267
Lake Tahoe Rise in Feet (assuming gates closed) <u>2/</u>	March-High	.30	17	1.74
	April-High	.15	10	1.46
Steamboat Creek at Steamboat	April-July	1.8	31	5.6
<u>CARSON RIVER</u>				
East Carson near Gardnerville, NV	March-July	52	26	198
	April-July	45	23	182
West Carson at Woodfords, CA	March-July	17	30	56
	April-July	14	27	52
Carson River near Carson City, NV	March-July	28	14	201
	April-July	20	11	178
Carson River near Fort Churchill, NV	March-July	20	11	181
	April-July	10	6	159
<u>WALKER RIVER</u>				
East Walker near Bridgeport, CA <u>1/</u>	March-Aug.	14	19	75
	April-Aug.	8	12	68
West Walker below Little Walker near Coleville, CA	March-July	50	33	151
	April-July	45	31	145
<u>SNAKE RIVER</u>				
Owyhee River near Owyhee, NV <u>1/</u>	March-July	16	20	81
	April-July	12	18	68
Owyhee River near Gold Creek, NV <u>1/</u>	March-July	5	22	23
	April-July	3	17	18
South Fork Owyhee Rv. nr White Rock, NV	April-July	5	5	94
Salmon Falls Creek near San Jacinto, NV	March-July	24	30	80
	March-Sept.	26	31	84
<u>COLORADO RIVER</u>				
Virgin River at Virgin, UT	April-June	17	35	48

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STREAMFLOW FORECASTS (Thousand Acre Feet) as of: March 1, 1977

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
<u>HUMBOLDT RIVER</u>				
Lamoille Creek near Lamoille, NV	March-July	8	28	29
	April-July	7	25	28
South Fork Humboldt above Dixie Creek	March-July	17	24	71
	April-July	15	23	66
Marys River above Hot Springs, NV	March-July	12	32	38
	April-July	9	27	34
North Fork Humboldt at Devils Gate, NV	March-July	7	18	40
	April-July	5	16	32
Humboldt River at Palisade, NV	March-July	30	14	218
	April-July	20	10	193
Humboldt River at Comus, NV	March-July	20	12	171
	April-July	12	8	149
Kingston Creek near Austin, NV	April-July	1.0	26	3.7
Little Humboldt Rv. nr Paradise Va., NV	April-July	1	10	10
Martin Creek near Paradise, NV	March-July	5	26	19
	April-July	4	25	16
Reese River near Ione, NV	April-July	1.4	23	6
Rock Creek near Battle, Mountain, NV	April-July	1.9	10	19
<u>GREAT NORTHERN BASIN</u>				
Bidwell Creek near Fort Bidwell, CA	April-July	3.0	26	11.5
Mill Creek near Cedarville, CA	April-July	1.5	32	4.7
Deep Creek near Cedarville, CA	April-July	1	30	3.3
Eagle creek near Eagleville, CA	April-July	1.7	40	4.3
Quinn River near McDermitt, NV	April-July	1	40	17
East Fork Quinn Rv. near McDermitt, NV	April-July	2	17	12
<u>EASTERN NEVADA</u>				
Franklin River near Arthur, NV	April-July	1.7	24	7.2
Steptoe Creek near Ely, NV	April-July	0.8	29	2.7
1/ Corrected for storage				
2/ Forecast issued by Truckee Basin Water Committee				

# **PEAK FLOWS** (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average †
East Fork Carson River near Gardnerville, NV	550 - 750	1728
Carson River near Carson City, NV	450 - 650	1901
Carson River near Fort Churchill, NV	350 - 550	1730
West Walker River below Little Walker near Coleville, CA	650 - 850	1532

## **FORECAST DATE of LOW FLOW VALUES**

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
East Carson River near Gardnerville, NV	200	6/10	7/20

## **SOIL MOISTURE MEASUREMENTS**

STATION	Profile (Inches)		Soil Moisture (Inches)		
	Depth	Capacity	Date	This Year	Average †
<u>OWYHEE-HUMBOLDT BASIN</u>					
Bear Creek	72	16.9			11.5*
Big Bend	48	16.7	NS		15.0*
Rodeo Flat	42	11.0	2/23/77	4.2	9.0*
Taylor Canyon	48	15.1	2/23/77	9.2	12.5*
<u>TAHOE-TRUCKEE BASIN</u>					
Independence Camp	34	6.1	2/26/77	2.2	4.5*
Marlette Lake	50	3.7	NS		2.8
<u>WALKER BASIN</u>					
Sonora Pass	48	8.3	NS		7.3*
Virginia Lakes Ridge	40	5.0	2/26/77	1.6	2.3*
* Adjusted average					

† 1958-1972 period.

**RESERVOIR STORAGE (Thousand Acre Feet) as of March 1, 1977**

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average <sup>†</sup>
Owyhee	Wild Horse	72	45	54	18
Lower Humboldt	Rye Patch	157	108	164	95
Colorado	Mohave	1,810	1,671	1,681	1,689
Colorado	Mead	27,217	21,844	20,528	17,224
Tahoe	Tahoe	732	165	502	443
Truckee	Boca	41	27	30	11
Truckee	Stampede	220	40	140	**
Truckee	Prosser***	30	0.1	10	8*
Carson	Lahontan	291	174	215	204
West Walker	Topaz	59	13	47	40
East Walker	Bridgeport	42	13	36	31
* Adjusted average					
** Storage began August 1, 1969.					
*** Flood control use allocation of 20,000 acre-feet between November 1 and April 10.					

**TOTAL RESERVOIR STORAGE (Thousand Acre Feet)**

MONTH	This Year	Last Year	Average <sup>†</sup>
October 1	574	1,037	718
January 1	488	1,005	714
February 1	509	1,015	782
March 1	545	1,048	843
April 1		1 048	893
May 1		1,037	934

<sup>†</sup> 1958-1972 period.

The above data developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz, and Bridgeport Reservoirs in 1,000 Acre-Feet.

TOTAL USABLE CAPACITY 1,394



# SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †
<u>LAKE TAHOE</u>						
Echo Peak (CA)	7800	2/26/77	24	5.6	9.0	-
Echo Summit (CA)	7450	2/28/77	30	0.4	10.3	29.6
Freel Bench (CA)	7300	2/26/77	11	2.6	6.0a	12.1*
Glenbrook #2	6900	2/25/77	16	3.7	4.3	10.6
Hagans Meadow	8000	2/26/77	17	3.9	7.3	16.1
Heavenly Valley	8800	2/26/77	26	7.6	13.0	-
Lake Lucille (CA)	8200	2/24/77	60	14.4	29.7	-
Marlette Lake	8000	2/24/77	27	5.5	8.1	18.6
Richardsons #2 (CA)	6500	2/26/77	20	4.8	6.4	15.6
Rubicon #1 (CA)	8100	2/26/77	42	10.5	19.2	40.0
Rubicon #2 (CA)	7500	2/26/77	23	5.6	8.6	24.8*
Tahoe City Cross (CA)	6750	2/27/77	23	6.8	4.5	-
Upper Truckee (CA)	6400	2/26/77	10	2.4	-	10.1
Ward Creek #2 (CA)	7000	2/24/77	38	9.6	14.0	35.1
Ward Creek #3 (CA)	6750	2/24/77	46	11.6	14.1	-
<u>TRUCKEE RIVER</u>						
Boca #2 (CA)	5900	2/27/77	7	1.9	4.4	6.2
Brockway Summit (CA)	7100	2/28/77	18	4.2	2.9	17.5*
Castle Creek	7400	3/1/77	39	11.8	14.6	-
Donner Park #2 (CA)	6000	2/27/77	17	5.3	6.9	15.8*
Donner Summit (CA)	6900	2/24/77	31	8.2	11.2	32.5
Fordyce Lake (CA)	6500	2/25/77	28	9.7	12.4	31.5*
Furnace Flat (CA)	6700	2/25/77	39	12.3	14.7	36.1*
Independence Camp (CA)	7000	2/24/77	23	5.6	7.5	19.6
Independence Creek (CA)	6500	2/24/77	14	2.9	3.4	12.2*
Independence Lake (CA)	8450	2/24/77	37	9.1	14.6	35.6
Little Valley	6300	2/25/77	13	3.0	4.1	8.5
Mount Rose	9000	2/24/77	36	7.9	9.8	-
Mount Rose Ski Area	8850	2/24/77	50	10.0	14.4	-
Sage Hen Creek (CA)	6500	2/24/77	19	4.2	5.8	16.4
Squaw Valley #2 (CA)	7500	2/24/77	51	12.9	17.7	43.2
Truckee #2 (CA)	6400	2/28/77	15	3.6	3.8	13.9
Webber Lake	7000	NS				
Webber Peak	8000	NS				
<u>CARSON RIVER</u>						
Blue Lakes	8000	2/25/77	39	11.0a	10.6	-
Carson Pass, Upper (CA)	8600	2/28/77	22	6.3	10.5	31.1
Clear Creek	7300	2/25/77	17	3.1	3.9	11.9
Ebbetts Pass AM (CA)	8700	2/26/77	33	10.0a	13.0a	26.6*
Ebbetts Pass #2 (CA)	8700	2/26/77	29	8.8	-	-
Fish Valley, Upper (CA)	8050	2/26/77	11	2.9	4.0a	13.1*
Poison Flat	7900	2/26/77	18	5.1	4.0	13.9*
Wet Meadows Lake AM (CA)	8050	2/26/77	21	5.9a	7.0a	23.0*
Wet Meadows #2 (CA)	8050	2/26/77	29	8.3	-	-
Wolf Creek AM (CA)	8000	2/26/77	24	7.3a	8.0a	27.2*



# SHOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average †
<u>WALKER RIVER</u>						
Buckeye Roughs (CA)	7900	2/22/77	12	2.7	3.6	-
Center Mountain	9400	2/26/77	29	7.8	12.4	33.9
Leavitt Meadow (CA)	7200	2/26/77	8	2.0	1.6	-
Lobdell Lake	9200	2/26/77	13	2.2	2.3	14.4*
Sawmill Ridge (CA)	8750	2/26/77	18	4.2	3.3	-
Sonora Pass (CA)	8800	2/26/77	19	5.3	4.8	21.5
Tioga Pass (CA)	9900	2/25/77	25	7.6	8.8	-
Virginia Lakes (CA)	9500	2/26/77	22	5.4	3.0	15.5
Virginia Lakes Ridge (CA)	9200	2/26/77	23	5.0	4.3	-
Willow Flat (CA)	9900	2/26/77	10	2.5	2.5	-
<u>NORTHERN GREAT BASIN</u>						
Bald Mountain AM	6720	2/24/77	4	0.4a	0.5a	3.4
Barber Creek (CA)	6500	2/23/77	9	2.0	8.2	10.0
Cedar Pass (CA)	7100	2/22/77	12	3.0	11.6	13.1
Denio Creek AM (OR)	6000	3/4/77	1	0.1a	1.3a	0.5*
Disaster Peak	6500	2/24/77	10	1.8e	8.4	13.4
Dismal Swamp AM (CA)	7000	2/24/77	15	3.0a	19.1a	14.1
Eagle Peak (CA)	7200	NS				
49 Mountain	6000	2/25/77	8	1.5	3.7	3.7
Hays Canyon	6400	2/23/77	4	0.6	1.2	3.2
Little Bally Mountain AM	6000	2/24/77	6	0.6a	3.4a	2.3*
Mount Bidwell	7240	2/24/77	14	3.4	23.0	-
North Star	6200	2/24/77	16	3.9	18.4	-
Oregon Canyon AM (OR)	7240	3/4/77	4	0.4a	4.2	4.8*
Quinn Ridge AM	6300	3/4/77	T	0.1a	1.4a	1.8*
Reservation Creek (CA)	5900	2/25/77	11	3.0	13.6	9.4
Trout Creek AM (OR)	7800	3/4/77	12	2.4a	7.2a	6.4*
<u>SNAKE RIVER</u>						
Bear Creek	7800	3/5/77	38	8.6	18.8	17.3
Fox Creek	6800	3/5/77	21	4.8	10.4	9.0
Goat Creek	8800	3/5/77	28	6.0	14.7	16.0
Hummingbird Springs	8945	3/5/77	33	7.0	19.4	19.4
Merritt Mountain AM	7000	2/28/77	11	2.0a	6.6	5.8
Pole Creek Ranger Station	8330	3/5/77	35	7.9	18.8	16.8
Red Point AM	7940	NS				9.1
76 Creek	7100	3/5/77	18	4.3	9.9a	10.0
Stag Mountain AM	7700	2/28/77	6	0.8a	3.0	5.0*

# SNOW COURSE MEASUREMENTS

SNOW COURSE MEASUREMENTS		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †
<u>OWYHEE RIVER</u>						
Big Bend	6700	2/23/77	8	0.8	8.4	7.6
Columbia Basin AM	6650	2/28/77	6	0.8a	9.0a	8.1*
Fawn Creek AM	7000	2/28/77	6	1.1a	7.2a	4.4*
Gold Creek	6600	2/23/77	8	0.7	6.3	4.9
Jack Creek, Lower	6800	2/23/77	7	0.5	5.2	-
Jack Creek, Upper	7250	2/23/77	12	2.2	9.6	7.7
Jacks Peak	8420	2/23/77	28	6.2	20.6	-
Laurel Draw	6700	2/23/77	11	2.1	7.8	6.4
Louse Canyon AM (OR)	6440				3.4	2.8*
Taylor Canyon	6200	2/23/77	4	0.6	2.5	4.1
<u>UPPER HUMBOLDT RIVER</u>						
American Beauty AM	7800	2/28/77	6	1.3a	7.5	8.3*
Corral Canyon	8500	2/24/77	19	3.8	14.8	12.9
Dorsey Basin	8100	2/24	16	3.6	10.6	10.3
Dry Creek	6500	2/24/77	4	0.6	3.1	2.6
Fry Canyon	6700	2/23/77	6	0.8	7.5	6.3
Green Mountain	8000	2/24/77	15	3.2	9.7	11.2
Harrison Pass #1	6600	2/24/77	3	0.5	4.5	3.7*
Harrison Pass #2	7400	2/24/77	5	0.7	5.8	5.4*
Lamoille #1	7100	2/24/77	11	2.3	8.0	8.2
Lamoille #3	7700	2/24/77	16	3.2	8.4	9.9
Lamoille #5	8700	2/24/77	29	5.6	19.9	22.0
Pole Canyon	7700	2/24/77	19	3.1	-	6.9*
Robinson Lake AM	9200	2/28/77	3	0.3a	24.5	22.1*
Rodeo Flat	6800	2/23/77	5	0.7	5.5	4.9
Ryan Ranch	5800	2/25/77	T	0.1	0.0	0.9*
Smith Creek	7700	2/24/77	16	3.2		
Tent Mountain AM	7000	2/28/77	1	0.1a	7.0a	-
Tent Mountain AM	8350	NS			18.0a	-
Tremewan Ranch	5700	2/25/77	2	0.4	1.2	1.2
Trout Creek, Lower	6900	2/24/77	6	1.2	4.2	3.1
Trout Creek, Upper	8500	2/24/77	22	4.5	16.5	16.1
<u>LOWER HUMBOLDT RIVER</u>						
Big Creek Campground	6600	3/1/77	3	0.6	4.6	1.1
Big Creek Mine	7600	3/1/77	10	1.9	5.0	4.0
Big Creek, Upper	7800	3/1/77	12	2.7	7.5	5.1
Buckskin, Lower	6700	2/24/77	4	0.7	6.4	7.4
Buckskin, Upper	8200	2/24/77	4	0.4	8.1	8.7
Corral, Lower	7500	NS			2.0	1.4*
Golconda #2	6000	3/1/77	11	1.7	4.7	3.9
Granite Peak	7800	2/24/77	16	3.5	11.1	13.2
Lamance Creek	6000	2/24/77	10	2.0e	6.6	9.4
Martin Creek	6700	2/24/77	11	2.3	4.1	8.9
Midas AM	7200	2/28/77	T	0.1a	1.6	3.3
Toe Jam AM	7700	2/28/77	T	0.1a	7.2a	7.9*

# SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE NAME		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (inches)	Water Content (inches)	Last Year	Average <sup>†</sup>
<u>EASTERN NEVADA</u>						
Baker #1	7950	2/28/77	5	1.0	4.4	5.7
Baker #2	8950	2/28/77	15	2.5	9.5	11.9
Baker #3 AM	9250	2/25/77	18	3.5a	10.5a	13.0
Berry Creek	9100	3/4/77	27	5.3e	9.5a	11.5
Bird Creek	7500	2/28/77	1	0.1	4.6	3.5
Hole-in-Mountain	7900	2/24/77	16	3.1	14.6	-
Kalamazoo Creek	7400	2/27/77	10	2.6	6.2	6.1
Mount Defiance AM	9400	2/25/77	18	3.6a	15.5a	-
Murray Summit	7250	2/24/77	0	0.0	2.5	2.8
Robinson Summit	7600	2/24/77	1	0.1	1.6	1.9
Silver Creek #2 AM	8000	2/25/77	11	2.2a	4.0a	4.7
Ward Mountain #2 AM	7400	2/25/77	11	2.2a	3.8a	8.2
White River #1	7400	2/25/77	0	0.0	2.8	2.5*
<u>CENTRAL GREAT BASIN</u>						
Campito Mountain (CA)	10200	2/25/77	5	1.0	3.5	4.9*
Chiatovich Flat AM	10500	3/4/77	0	0.0	2.4	3.2
Clark Canyon	9000	3/1/77	2	0.6	6.0	7.3
Montgomery Pass	7100	2/25/77	0	0.0	1.9	1.3*
Pinchot Creek AM	9300	3/4/77	0	0.0	0.5	0.9*
Piute Pass AM	11700	3/4/77	0	0.0	2.0	4.7*
Trough Springs	8500	3/1/77	3	1.0	3.8	5.0*
<u>LOWER COLORADO RIVER</u>						
Kyle Canyon	8200	2/28/77	4	1.5	7.8	9.6
Lee Canyon #2	9000	2/28/77	5	1.5	8.9	9.0
Lee Canyon #3	8500	2/28/77	3	1.0	7.0	7.5*
Mathew Canyon	6000	2/28/77	0	0.0	0.2	4.4
Pine Canyon	6200	2/28/77	0	0.0	1.2	6.3
Rainbow Canyon #2	8100	2/28/77	10	3.4	9.3	13.1*

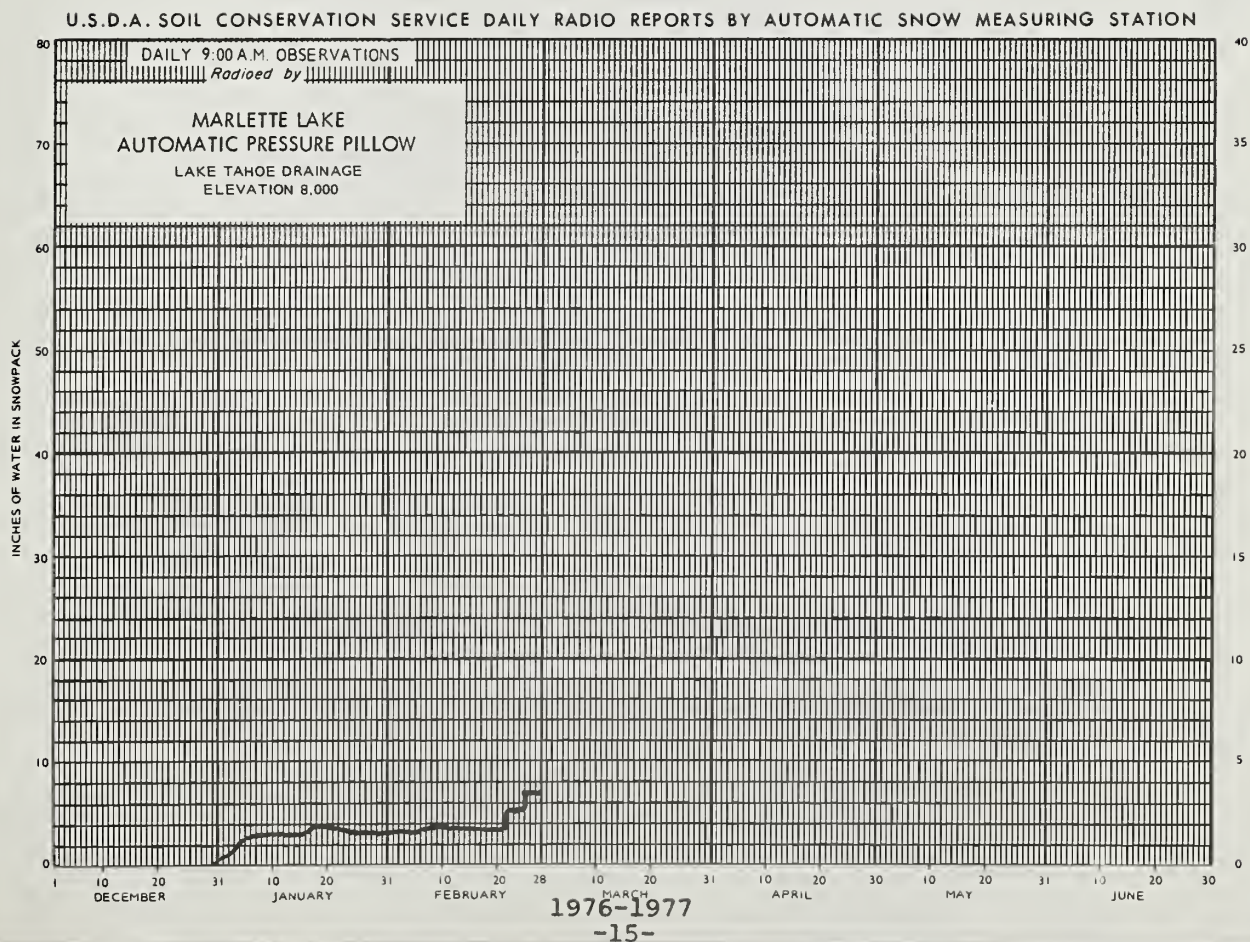
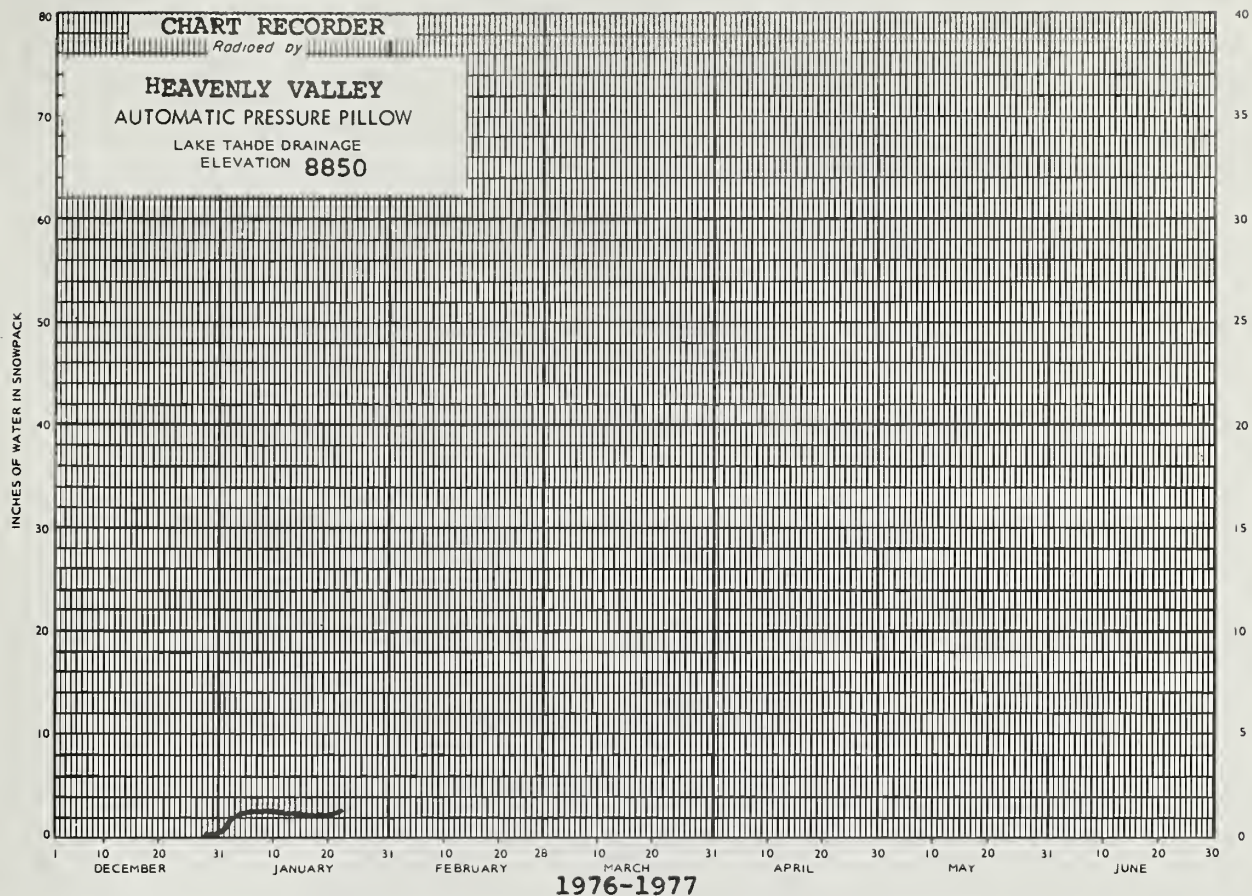
NS No survey  
e Estimate

NOTE:  
All averages based on 1958-72, 15 year period. Forecast period is April 1 through July 31 unless otherwise noted.  
a-Aerial marker; water content estimated. \* 1958-72 adjusted average.



## PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Last Year	This Year	Last Year	Percent of Average
<u>LAKE TAHOE-TRUCKEE</u>							
Echo Peak	7800	2/26/77	4.4	3.5	12.1	23.0	-
Fallen Leaf	6240	2/28/77	2.5	3.0	6.8	10.7	-
Hagans Meadow	8000	2/26/77	2.9	-	7.9	-	-
Independence Camp	7000	2/24/77	2.8	2.3	7.1	11.9	-
Independence Creek	6500	2/24/77	3.1	2.3	9.9	4.7	-
Independence Lake	8450	2/24/77	3.0	-	12.7	-	-
Marlette Lake	8000	NS					
Mount Rose	9000	2/24/77	2.4	4.0	5.8	12.0	-
Tahoe City Cross	6750	2/27/77	3.0	3.0	8.8	8.8	-
Truckee #2	6400	2/28/77	2.6	2.8	6.0	5.2	-
Ward Creek #3	6750	2/24/77	4.8	5.3	16.3	23.9	-
<u>CARSON RIVER</u>							
Ebbetts Pass	8750	2/26/77	3.5	-	11.8	-	-
Poison Flat	7900	2/26/77	0.2	2.6	3.0	10.24	-
Wet Meadows	8050	2/26/77	2.3	-	8.7	-	-
<u>WALKER RIVER</u>							
Lobdell Lake	9200	2/26/77	1.5	-	3.5	-	-
Sonora Pass	8800	2/26/77	2.5	3.4	11.5	12.5	-
Virginia Lakes Ridge	9200	2/26/77	2.3	-	15.7	-	-
<u>HUMBOLDT RIVER</u>							
Corral Canyon	2500	2/24/77	-	-	6.3	-	-
Dorsey Basin	8100	2/25/77	1.3	-	6.8	-	50
Green Mountain	8000	2/24/77	-	-	7.6	6.3	64
Lamoille #3	7700	2/24/77	1.5	-	6.8	-	-
Midas	7200	NS					
Rodeo Flat	6800	2/23/77	0.5	1.3	5.0	12.3	46
Trout Creek, Lower	6900	2/25/77	3.8	-	3.8	12.0	34
<u>OWYHEE RIVER</u>							
Big Bend	6700	2/23/77	0.3	1.5	8.7	10.0	85
Jacks Peak	8420	2/23/77	1.3	-	15.8	-	-
Taylor Canyon	6200	2/25/77	2.0	0.0	8.0	7.0	111
Upper Jack Creek	7250	2/23/77	1.3	-	13.5	-	-







## Agencies Cooperating in Collecting Data Contained in this Bulletin

### FEDERAL

- Agricultural Research Service
- Bureau of Reclamation
- Fish and Wildlife Service
- Forest Service
- Geological Survey
- Navy
- Soil Conservation Service
- U. S. District Court - Federal Water Master
- NOAA, National Weather Service

### STATE

- California Cooperative Snow Surveys
- California Department of Parks and Recreation
- California Department of Water Resources
- Colorado River Commission of Nevada
- Idaho Cooperative Snow Surveys
- Nevada Association of Conservation Districts
- Nevada Department of Conservation & Natural Resources
  - Division of Water Resources
  - Nevada State Forester
- Oregon Cooperative Snow Surveys
- Utah Cooperative Snow Surveys
- White Mountain Research Station, Univ. of California

### PRIVATE

- Amalgamated Sugar Company
- Kennecott Copper Corporation
- Nevada Irrigation District
- Owyhee Project North Board of Control
- Owyhee Project South Board of Control
- Pacific Gas and Electric Company
- Pershing County Water Conservation District
- Sierra Pacific Power Company
- Truckee-Corson Irrigation District
- Walker River Irrigation District
- Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their Cooperation is gratefully acknowledged.

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## FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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water supply for irrigation,  
domestic and municipal water  
supply, hydro-electric power  
generation, navigation,  
mining and industry

*"The Conservation of Water begins  
with the Snow Survey"*

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